## In the Claims

Claims 1 – 41 (Cancelled)

42. (Currently Amended) A process for treating and/or preventing fibroses comprising administering a therapeutically effective amount of the pharmaceutical composition which comprises at least one biocompatible polymer according to Claim 1 of the following general formula (I):

 $\underline{A}_{a}\underline{X}_{x}\underline{Y}_{y}$ 

wherein:

- A represents a monomer,

- X represents a carboxyl group bonded to monomer A and is contained within a group according to the following formula: -R-COO-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,

- Y represents a sulfate or sulfonate group bonded to monomer A and is contained within a group according to one of the following formulas: -R-O-SO<sub>3</sub>-R', -R-N-SO<sub>3</sub>-R', -R-SO<sub>3</sub>-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,

- a represents the number of monomers A such that the mass of said polymers of formula

(I) is greater than approximately 5,000 da,

- x represents a substitution rate of the monomers A by the groups X, which is between approximately 20 and 150%, and

- y represents a substitution rate of the monomers A by the groups Y, which is between approximately 30 and 150%.

43. (Currently Amended) A process for regulation of proliferation of mesenchymal cells and regulation of the quality of the type of collagen that such cells secrete comprising administering a therapeutically effective amount of the pharmaceutical composition which comprises at least one biocompatible polymer according to Claim 1 of the following general formula (I):

 $\underline{A_{\underline{a}}X_{\underline{x}}Y_{\underline{y}}}$ 

wherein:

- A represents a monomer,

- X represents a carboxyl group bonded to monomer A and is contained within a group according to the following formula: -R-COO-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,

- Y represents a sulfate or sulfonate group bonded to monomer A and is contained within a group according to one of the following formulas: -R-O-SO<sub>3</sub>-R', -R-N-SO<sub>3</sub>-R', -R-SO<sub>3</sub>-R', in which R is a bond or an aliphatic hydrocarbon chain, optionally branched and/or unsaturated, and which can contain one or more aromatic rings except for benzylamine and benzylamine sulfonate, and R' represents a hydrogen atom or a cation,

- a represents the number of monomers A such that the mass of said polymers of formula

(I) is greater than approximately 5,000 da,

- x represents a substitution rate of the monomers A by the groups X, which is between approximately 20 and 150%, and
- y represents a substitution rate of the monomers A by the groups Y, which is between approximately 30 and 150%.

Claims 44 - 60 (Cancelled)

- 61. (New) The process according to Claim 42, wherein the fibroses are fibroses of smooth muscle tissue.
- 62. (New) The process according to Claim 42, wherein the fibroses are fibroses of mesenchymal tissue.